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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,476	05/23/2005	Roy J Rosser	5640-1-2US/(28,642-A-USA	5175
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EXAMINER				
GADDY, BENJAMINE				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/536,476

Applicant(s)

ROSSER ET AL.

Examiner

Benjamin E. Gaddy

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment to the title is noted. The amended title is adequately descriptive of the invention. Therefore the previous objection to the title is withdrawn.
2. The applicant's note about the previous objection to the use of trademarks is noted, and the examiner withdraws the previous objection to the use of trademarks in the specification.
3. The applicant's amendment of claims 6 and 7 is sufficient to overcome the previous rejection under Section 112. As such, the 112 rejection is withdrawn in light of the amendment.

Response to Arguments

4. Applicant's arguments filed 1/16/2008 have been fully considered but they are not persuasive.

The applicant's argued features, i.e., an autonomous response method, updating a database, generating a response, following a conversation strategy, choosing a context element, and searching a database, reads upon Strubbe in view of Karaali as follows.

Strubbe discusses an interaction simulator. Thus Strubbe shows the limitation of "an autonomous response method." Strubbe discusses storing the response data. Thus Strubbe shows the limitation of "updating a database." Strubbe discusses response data is generated. Thus Strubbe shows the limitation of "generating a response." Strubbe discusses the operation and strategy of the conversation simulator. Thus Strubbe shows the limitation of "following a conversation strategy." Strubbe discusses determining meaning from context. Thus Strubbe shows the limitation of "choosing a context element." Strubbe discusses selecting appropriate data. Thus Strubbe shows the limitation of "searching a database."

As a result the argued features were shown by Strubbe in view of Karaali.

Regarding the applicant's arguments within several of the dependencies Strubbe, as discussed above discloses those limitations or Strubbe as modified by the secondary references shows those limitations.

5. In response to applicant's argument that the secondary references are not combinable, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion to combine the references was shown in the text of the secondary references.

7. In response to applicant's argument that the secondary references are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re*

Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, all references are natural language applications and therefore are analogous.

As a result the argued features read upon the references as follows.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 6, 7, 8, 10, 11, 16, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe (US 6,721,706) in view of Karaali (US 6,182,028) and further in view of Kay (US 6,430,602).

Consider claims 1 and 11: Strubbe discloses an autonomous response method (**see Col. 8, lines 30-40, where Strubbe discusses an interaction simulator**),

comprising: autonomously updating a statement-response database; (**see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it**)

and autonomously generating a natural language response to a received natural language input, (**see Col. 20, lines 40-55, where Strubbe discusses the response data is generated**)

wherein said generating a response comprises following a conversation strategy, (see Col. 19, lines 20-30, where Strubbe discusses the operation of the conversation simulator and describes the strategy)

choosing at least one context element from a database and (see Col. 19, lines 40-50, where Strubbe discusses determining meaning from context)

searching said updated statement-response database using context to select a response.

(see Col. 20, lines 34-40, where Strubbe discusses selecting appropriate data from the data store, therefore searching)

Strubbe does not specifically disclose a context database, however Karaali discloses a context database (see Col. 4, line 64 – Col. 5, lines 10, where Karaali discusses a tag-context knowledge database). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use a context database as taught by Karaali, thus advantageously combining the processing of both local and expanded context, as discussed by Karaali (see Col. 2, lines 14-16).

Strubbe as modified by Karaali does not specifically disclose using context concepts to retrieve information, however Kay discloses using context concepts to retrieve information (see Col. 5, lines 23-40, where Kay discusses the context of previous searches used to influence a later query). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe as modified by Karaali, and use using context concepts to retrieve information as taught by Kay, thus enabling a method to interactively respond to requests, as discussed by Kay (see Col. 2, lines 30-35).

Consider claims 6 and 16: Strubbe as modified by Karaali discloses generating a response to a natural language query further comprises: receiving said query as an electronic character stream (see Col. 20, lines 15-35, where Strubbe discusses user input);

parsing said query into a statement (see Col. 20, lines 25-35, where Strubbe discusses a parser);

generating a plurality of candidate responses appropriate to said statement by searching said statement-response database (see Col. 20, lines 20-25, where Strubbe discusses a response generator, and Col. 20, lines 34-40, where Strubbe discusses selecting appropriate data from the data store, therefore searching the database) ;

choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database (see Col. 20, lines 24-40, where Strubbe discusses gathering intelligence about the conversation and Col. 19, lines 20-30, where Strubbe discusses the strategy);

outputting said best response as an electronic character stream (see Col. 26, lines 10-18, where Strubbe discusses outputting to a display device, therefore using an electronic character stream).

Consider claims 7 and 17: Strubbe as modified by Karaali discloses generating a response to a natural language query further comprises: receiving an input audio signal corresponding to a human voice representation of said query; converting said input audio signal into a query represented by an electronic character stream (see Col. 20, lines 15-25, where Strubbe discusses text derived from speech, therefore receiving and converting);

parsing said query into a statement (see Col. 20, lines 25-35, where Strubbe discusses **a parser**);

generating a plurality of candidate responses appropriate to said statement by searching said statement-response database; choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database (see Col. 20, lines 34-40, where Strubbe discusses **selecting appropriate data from the data store, therefore generating and choosing**);

generating an electronic character stream representing a natural language version of said best response (see Col. 25, lines 60-68 where Strubbe discusses **a template text**);

and, converting said electronic character stream into a synthetic speech signal corresponding to an audible version of said best response (see Col. 25, lines 60-68, where Strubbe discusses **a text-to-speech conversion**).

Consider claims 8 and 18: Strubbe as modified by Karaali discloses the context database includes an event result (see Col. 22, lines 36-50).

Consider claims 10 and 20: Strubbe discloses the conversation strategy comprises: scoring said query by assessing the level of language use in said query input to provide a metric of query sophistication (see Col. 17, lines 52-68);

generating at least two candidate responses appropriate to said query (see Col. 20, lines 34-40);

scoring said at least two candidate responses by assessing the level of language use in said candidate responses to provide a metric of response sophistication for each candidate response (see Col. 20, lines 34-40);

choosing said candidate response having said metric of response sophistication that most closely matches said metric of query sophistication (see Col. 17).

10. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe (US 6,721,706) in view of Karaali (US 6,182,028) and Kay (US 6,430,602) as applied to claim 1 and 11 above, and further in view of Johnson (US 6,567,805).

Consider claims 2 and 12: Strubbe and Karaali disclose autonomously loading content that matches at least one search criteria from a source formatted to be in human readable form; converting said downloaded publication content into at least one entry suitable for use in said statement-response database; and, storing said at least one entry in said statement-response database (see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it).

Strubbe and Karaali do not specifically disclose downloading publication content, however Johnson discloses downloading publication content (see Col. 8, lines 54-68, where Johnson discusses providing information from a website). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe and Karaali, and use downloading publication content as taught by Johnson, thus enabling a system to respond to a user query in the context of a dialog, as discussed by Johnson (see Col. 1, lines 35-40).

11. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe (US 6,721,706) in view of Karaali (US 6,182,028) and Kay (US 6,430,602) as applied to claim 1 and 11 above, and further in view of Dagtas (US 6,973,256).

Consider claim 3 and 13: Strubbe and Karaali disclose autonomously acquiring information, wherein said information matches at least one search criteria; transforming said information into at least one entry suitable for use in said statement-response database; and, storing said at least one entry in said statement-response database (**see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it).**

Strubbe and Karaali do not specifically disclose acquiring an information stream from an audio-visual program, however Dagtas discloses acquiring an information stream from an audio-visual program (**see Col. 6, lines 26-44, where Dagtas discusses detecting spoken words in the audio track of a video program**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe and Karaali, and use acquiring an information stream from an audio-visual program as taught by Dagtas, thus allowing the detection of interesting events in a video program, as discussed by Dagtas (**see Col. 1, lines 60-68**).

12. Claims 4, 5, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe (US 6,721,706) in view of Karaali (US 6,182,028) and Kay (US 6,430,602) as applied to claim 1 and 11 above, and further in view of Gusler (US 7,058,565).

Consider claims 4 and 14: Strubbe discloses the statement-response database includes at least one list of response entries appropriate to a statement (**see Col. 24, lines 52-63, where Strubbe discusses the response generator selects a response**).

Strubbe and Karaali do not specifically disclose a ranked-list, however Gusler discloses a ranked-list (**see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe and Karaali, and use a ranked-list as taught by Gusler, thus utilizing key words in speech to improve customer service, as discussed by Gusler (**see Col. 1, lines 45-50**).

Consider claims 5 and 15: Strubbe discloses the statement-response database includes at least one list of response entries related to prior conversations with a specific user (**see Col. 14, lines 1-10, where Strubbe discusses previous conversation**).

Strubbe and Karaali do not specifically disclose a ranked-list, however Gusler discloses a ranked-list (**see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking**). It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe and Karaali, and use a ranked-list as taught by Gusler, thus utilizing key words in speech to improve customer service, as discussed by Gusler (**see Col. 1, lines 45-50**).

13. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe (US 6,721,706) in view of Karaali (US 6,182,028) and Kay (US 6,430,602) as applied to claim 1 and 11 above, and further in view of Takebayashi (US 5,357,596).

Consider claims 9 and 19: Strubbe discloses the conversation strategy comprises:
negotiating an identity of a current enquirer (see Col. 13, lines 20-30);

negotiating a meaning of a current query (see Col. 20, lines 25-35); and, negotiating a
conclusion to a current conversation.

Strubbe and Karaali do not specifically disclose a conclusion, however Takebayashi
discloses a conclusion (see Col. 29, lines 43-48, where Takebayashi discusses the end of
the dialogue). It would have been obvious to one skilled in the art at the time the invention
was made to modify the invention of Strubbe and Karaali, and use a conclusion as taught by
Takebayashi, thus providing a system capable of natural and smooth dialogue, as discussed
by Takebayashi (see Col. 3, lines 15-20).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this
Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).
Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE
MONTHS from the mailing date of this action. In the event a first reply is filed within TWO
MONTHS of the mailing date of this final action and the advisory action is not mailed until after
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E. Gaddy whose telephone number is (571) 270-5134. The examiner can normally be reached on M-TH 9am - 4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin E. Gaddy

/Benjamin E Gaddy/

Art Unit: 2626

Examiner, Art Unit 2626

4/11/08

/Patrick N. Edouard/

Supervisory Patent Examiner, Art Unit 2626